

SAFETY DATA SHEET
TWO PACK WATER BASED LACQUER – HARDENER

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name: Two Pack Water Based Lacquer –Hardener

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Uses: Hardener for two component surface coating

1.3 Details of the supplier of the safety data sheet

Supplier: Pittaway Special Coatings Ltd
106 – 114 Flinton Street
Hull
HU3 4NA
Tel: +44 (0) 1482 329007
Fax: +44 (0) 1482 213053
info@ilumitex.co.uk

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards. Not Classified.

Human health

Acute Tox. 4 – H332; Skin Sens. 1 – H317; STOT SE – H335

Environment

Not classified.

Classification (1999/45/EEC) Xn; R20. Xi; R37. R43

The full text for all the R Phrases and Hazardous Statements are displayed in Section 16.

Human health

Contains non-volatile isocyanate. Heating may generate vapours which irritate the respiratory system, cause asthmatic breathing, breathlessness and risk of development of respiratory allergy.

2.2 Label Elements

Contains

HEXAMETHYLENE-1,6-DI-ISOCYANATE HOMOPOLYMER

Label in accordance with (EC) No. 1272/2008

Labeling



Signal Word

Warning

Two Pack Water Based Lacquer – Hardener

Hazard Statements

H317 May cause an allergic skin reaction.
 H332 Harmful if inhaled
 H335 May cause respiratory irritation.

Precautionary Statements

P102 Keep out of reach of children.
 P101 If medical advice is needed, have product container or label at hand.
 P271 Use only outdoors or in a well-ventilated area.
 P262 Do not get in eyes, on skin or on clothing.
 P261 Avoid breathing vapours.
 P312 Call a POISON CENTRE or doctor if you feel unwell.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with national regulations.

Supplementary Precautionary Statements

P302+352 IF ON SKIN: Wash with plenty of soap and water.
 P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P333+313 If skin irritation or rash occurs; Get medical advice/attention.
 P363 Wash contaminated clothing before reuse.
 P321 Specific treatment (see medical advice on this label).
 P43+233 Store in a well-ventilated place. Keep container tightly closed.

Supplemental label information

EUH204 Contains isocyanates. May product an allergic reaction.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

| | | |
|---|--|--|
| HEXAMETHYLENE-1,6-DI-ISOCYANATE HOMOPOLYMER | | 30-60% |
| CAS-No: 28182-81-2 | EC No: 931-274-8 | Registration Number: 01-2119485796-17-0002 |
| Classification (EC 1272/2008) Acute Tox.4 – H332 Skin Sens 1 – H317 STOT SE 3 - H335 | Classification (67/548/EEC) Xn;R20 Xi;R37 R43 | |

| | | |
|--|------------------------------------|--------|
| HEXAMETHYLENE-1,6-DI-ISOCYANATE HOMOPOLYMER | | 30-60% |
| CAS-No: 28162-81-2 | EC No: 500-060-2 | |
| Classification (EC 1272/2008) Skin Sens. 1-H317 | Classification (67/548/EEC) R43 | |

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| | | |
|-------------------------------|------------------------------|-----|
| HEXAMETHYLENE--DI-ISOCYANATE | | <1% |
| CAS-No: 822-06-0 | EC No: 212-485-8 | |
| Classification (EC 1272/2008) | Classification (67/5484/EEC) | |
| Acute Tox. 4-H302 | T; R23 | |
| Acute Tox. 1 – H330 | R42/43 | |
| Skin Irrit. 2 – H315 | Xi; R36/37/38 | |
| Eye Irrit. 2 – H319 | | |
| Resp. Sens. 1 – H334 | | |
| Skin Sens. 1 - H317 | | |
| STOT SE 3 – H335 | | |

The full text for R-Phrases and Hazard Statements are displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

General Information

Remove soiled, soaked clothing immediately. Remove affected person from source of contamination.

Inhalation

Fresh air and rest. Get medical attention if any discomfort continues. Show this sheet to the doctor.

Ingestion

DO NOT induce vomiting. Get medical attention immediately. Provide fresh air, warmth and rest, preferably in comfortable upright sitting position.

Skin Contact

Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water.

Eye Contact

Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes and get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

General Information

If adverse symptoms develop as described the casualty should be transferred to hospital as soon as possible.

4.3 Indication of any immediate medical attention and special treatment needed

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing Media

Extinguish with foam, carbon dioxide, dry powder or water fog. Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special hazards arising from the substance or mixture

Combustible material. When heated and in case of fire, toxic vapours / gases may be formed.

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5.3 Advice for firefighters

Special Fire Fighting Procedures

Keep up-wind to avoid fumes. Use water SPRAY only to cool containers! Do not put water on leaked material.

Protective Equipment for Fire-Fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. Do not smoke, use open fire or other sources of ignition. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.

6.2 Environmental Precautions

Contain spillages using bunding. Do not allow to enter drains, sewers or watercourses.

6.3 Methods and Material for containment and cleaning up

Should be prevented from entering drains. Absorb in vermiculite, dry sand or earth and place into containers. Collect spillage in containers, seal securely and deliver for disposal to local regulations. Flush contaminated area with plenty of water.

6.4 Reference to other sections

For personal protection, see section 8. Collect and dispose of spillage as indicated in section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Mechanical ventilation or local exhaust ventilation is required. Avoid inhalation of vapours. Avoid spilling, skin and eye contact. Good personal hygiene is necessary. Use approved respirator if air contamination is above accepted level. Do not eat, drink or smoke when using the product. The Manual Handling Operations Regulations may apply to the handling of containers of this product. To assist employers, the following method of calculating the weight for any pack size is given. Take the pack size volume in litres and multiply this figure by the specific gravity value given in section 9. This will give the net weight of the coating in kilograms. Allowance will then have to be made for the immediate packaging to give an approximate gross weight.

7.2. Conditions for safe storage, including any incompatibilities

Store in closed original container at temperatures between 5°C and 25°C. Keep away from heat, sparks and open flame. Keep containers tightly closed. Keep upright. Store in locked, well ventilated room and isolated from acids. Store separate from: Oxidizing material, Alkalis, Acids.

7.3. Specific End Use(s)

The identified uses for this product are detailed in Section 12.

Usage Description

Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labeled container.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

| Name | STD | TWA – 8 Hrs | | STEL – 15 Min | | Notes |
|--|-----|-----------------|------------|-----------------|------------|-------------|
| HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER | WEL | 0.02 ppm Sen | | 0.07 ppm Sen | | as NCO |
| HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER | WEL | 0.02 ppm Sen | | 0.07 ppm Sen | | |
| HEXAMETHYLENE-DI-ISOCYANATE | WEL | | 0.02 mg/m3 | | 0.07 mg/m3 | Sen, as NCO |

WEL = Workplace Exposure Limit

Sk = Can be absorbed through skin

Sen = Capable of causing occupational asthma

HEXAMETHYLENE – DI-ISOCYANTATE (CAS: 822-06-0)

| | | | | | |
|-----------------------|------------|---------------|------------------|-------------------------|--|
| DNEL | | | | | |
| Professional | Dermal | Short Term | Systemic Effects | endpoint: sensitization | |
| Professional | Inhalation | Short Term | Systemic Effects | 0.07 mg/m3 | |
| Professional | Dermal | Long Term | Systemic Effects | endpoint: sensitization | |
| Professional | Inhalation | Long Term | Systemic Effects | 0.035 mg/m3 | |
| Professional | Dermal | Local Effects | | endpoint: sensitization | |
| Professional | Inhalation | Local Effects | | 0.035 mg/m3 | |
| PNEC | | | | | |
| Freshwater | >0.0774 | mg/l | | | |
| Marine water | >0.00774 | mg/l | | | |
| Sediment (Freshwater) | >0.01334 | mg/kg | | | |
| Sediment (Freshwater) | >0.001334 | mg/kg | | | |
| Soil | >0.0026 | mg/kg | | | |
| STP | 8.42 | mg/l | | | |

HEXAMETHYLENE 1,6 – DI-ISOCYANTATE (CAS: 28182-81-2)

| | | | | |
|----------------------|------------|------------|---------------|-----------|
| DNEL | | | | |
| Industry | Inhalation | Short Term | Local Effects | 1 mg/m3 |
| Industry | Inhalation | Long Term | Local Effects | 0.5 mg/m3 |
| STP | 32.28 | mg/l | | |
| Intermittent release | 1.27 | mg/l | | |
| Marinewater | 0.0127 | mg/l | | |
| Sediment | 266700 | mg/kg | | |
| Soil | 53200 | mg/kg | | |

8.2. Exposure Controls

Protective Equipment



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Engineering Measures

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation spray. Must not be handled in confined space without sufficient ventilation. Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Explosion-proof general and local exhaust ventilation. In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type A2/P3). At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used. Only PROFESSIONALS are permitted to apply this product by spray. Air-fed respiratory protective equipment with combined helmet and visor should be worn when this product is sprayed. This should be in addition to other measures to reduce exposure (e.g. in booth design and operation and process modifications).

Hand Protection

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin.

Eye Protection

Wear goggles /face shield. Wear splash-proof eye goggles to prevent any possibility of eye contact.

Other Protection

Wear appropriate clothing to prevent reasonably probable skin contact.

Hygiene Measures

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

Personal Protection

Unprotected persons should be kept away from treated areas.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | |
|---|--|
| Appearance | Clear, yellowish liquid |
| Colour | Yellowish |
| Odour | Slight odour |
| Solubility | Miscible in water. |
| Initial boiling point and boiling range | No measurable (owing to decomposition at <150°C) |
| Relative density | approx. 1.14 @20°C |
| Vapour pressure | Hexamethylene -1, 6 di-isocyanate 0.014 mbar @ 25°C, |
| Viscosity | approx. 1200 DIN 53019/1 mPas 23°C |
| Flash point | >120°C . CC (closed cup) |

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reaction with: Alcohols, glycols, amines. Bases protic solvents, Water and aqueous solutions with great release of CO₂ and hence risk of pressure build-up in confined areas. Forms an insoluble solid precipitate.

10.2. Chemical Stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not determined

10.4. Conditions to avoid

Avoid contact with water.

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10.5. Incompatible Materials

Materials To Avoid
Water. Steam. Water mixtures.

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No data recorded.

General Information

Preparation contains small volumes of isocyanate which may cause allergic reaction and irritation of respiratory system.

Inhalation

Vapours may irritate the respiratory system and cause coughing, asthmatic breathing and breathlessness. May cause sensitization by inhalation.

Ingestion

No harmful effects expected in amounts likely to be ingested by accident.

Skin Contact

May cause sensitization by skin contact.

Eye contact

May cause temporary eye irritation.

Route of entry

Inhalation. Skin absorption, Ingestion. Skin and/or eye contact.

Medical Considerations

Skin disorders and allergies. Avoid vomiting and normal rinse of stomach because of risk of aspiration.

Specific Effects

Frequent inhalation of vapours, may cause respiratory allergy.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product is not expected to be hazardous to aquatic organisms.

12.1. Toxicity

Acute fish toxicity

Toxicity to bacteria, algae and higher marine organisms not tested.

12.2. Persistence and Degradability

Degradability

The product is expected to be biodegradable.

12.3. Bioaccumulative Potential

The product is not bioaccumulating.

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12.4. Mobility in Soil

Mobility:

The product hardens to a solid immobile substance.

12.5 Results of PBT and vPvB assessment

Not classified as PBT/vPvB by current EU criteria

SECTION 13: DISPOSAL CONSIDERATIONS

General Information

Do not allow to enter drains, sewers or watercourses. Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local waste disposal authority.

13.1. Waste Treatment Methods

Empty containers may be disposed of after neutralizing any product remaining on the walls of the container with a mixture of water, ammonia and liquid soap.

Waste Class

When this material, in its liquid state, as supplied, becomes a waste, it is categorized as hazardous waste, with EWC code: 08 05 01. Part used containers and not drained and/or rigorously scraped out containers, are categorized as hazardous waste. Ideally this component should be mixed with the appropriate resin base and allowed to react fully producing a solid non hazardous waste. Transferring some, ready to use, mixed base / activator to the activator package and mixing again should ensure that any activator residue will fully react and harden. The drained and rigorously scraped out container can then be categorized as non-hazardous waste with code 15 01 02 (plastic packaging) or 15 01 04 (metal packaging) If mixed with other wastes, the above waste code may not be applicable.

SECTION 14: TRANSPORT INFORMATION

General

This product is not covered by international regulation on the transport of dangerous goods IATA, RID/ADR and IMDG.

14.1. UN Number

Not applicable

14.2. UN Proper Shipping Name

No information required

14.3. Transport Hazard Class(s)

No information required

14.4 Packing Group

No information require

14.5. Environmental Hazards

Environmentally hazardous substance/marine pollutant
No.

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14.6. Special Precautions for User

No information required

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations / Legislation specific for the substance or mixture

UK Regulatory References

The control of substances hazardous to Health Regulations 2002 (S.I. 2002 No. 2677) with amendments

Statutory Instruments

The chemicals (Hazard Information and Packaging for supply) Regulations 2009 (S.I. 2009 No. 716). Control of substances hazardous to Health.

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations, Classification and Labeling of Substances and Preparations Dangerous for Supply.

Dangerous Substances and Explosive Atmosphere Regulations 2002 (L138)

Guidance Notes

Workplace Exposure Limits EH40. CHIP for everyone HSG (108).

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC and 2000/21/EC, including amendments, Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EEC, and amending Regulation (EC) No 1907/2006 with amendments.

National Regulations

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

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SECTION 16: OTHER INFORMATION

Revision Comments

Issued in new format for Reach compliance in accordance with EC 1272/2008. Issued in accordance with Annex II to REACH, as amended by Commission Regulation (EU) No. 453/2010 . Update for CLP labeling.

Issued By Technical Department (P.E)

Revision Date 01/09/2015

Risk Phrases In Full

| | |
|-----------|--|
| R10 | Flammable |
| R20/21 | Harmful by inhalation and in contact with skin |
| R20 | Harmful by inhalation |
| R65 | Harmful: may cause lung damage if swallowed |
| R11 | Highly inflammable |
| R36/37/38 | Irritating to eyes, respiratory system and skin |
| R37 | Irritating to respiratory system |
| R42/43 | May cause sensitization by inhalation and skin contact |
| R43 | May cause sensitization by skin contact |
| R23 | Toxic by inhalation |

Hazard Statements In Full

| | |
|------|--|
| H319 | Causes serious eye irritation |
| H315 | Causes skin irritation |
| H330 | Fatal if inhaled |
| H226 | Flammable liquid and vapour |
| H332 | Harmful if inhaled |
| H302 | Harmful if swallowed |
| H312 | Harmful in contact with skin |
| H225 | Highly flammable liquid and vapour |
| H304 | May be fatal if swallowed and enters airways |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| H317 | May cause an allergic skin reaction |
| H373 | May cause damage to organs through prolonged or repeated exposure if inhaled |
| H335 | May cause respiratory irritation |

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.